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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,213	07/15/2003	Edward Hosung Park	03-0020	8709

29293 7590 01/07/2005

FREUDENBERG-NOK GENERAL PARTNERSHIP  
INTELLECTUAL PROPERTY DEPT.  
47690 EAST ANCHOR COURT  
PLYMOUTH, MI 48170-2455

EXAMINER

NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/620,213

Applicant(s)

PARK, EDWARD HOSUNG

Examiner

Nathan M. Nutter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-95 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-95 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 0203 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1003</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to "a cured fluorocarbon elastomer dispersed in a matrix comprising a thermoplastic material, wherein the thermoplastic material comprises a non-fluorine containing thermoplastic polymer, wherein the cured fluorocarbon elastomer is present at a level of greater than or equal to 35% by weight based on the total weight of" the composition, classified in class 525, subclasses vary.
- II. Claims 12-24, drawn to "a cured fluorocarbon elastomer dispersed in a thermoplastic matrix, wherein the thermoplastic matrix comprises a non-fluorine containing thermoplastic polymer, and wherein the cured fluorocarbon elastomer is present as a discrete phase or a phase co-continuous with the matrix, and wherein the dimensions of the elastomer phase are less than 10  $\mu\text{m}$ ," classified in class 525, subclasses vary.
- III. Claims 25-30, drawn to a product-by-process comprising manufacture of "(a) processable rubber composition made by a process comprising the step of dynamically vulcanizing a fluorocarbon elastomer in the presence of a non-fluorine-containing thermoplastic material," classified in class 525, subclasses vary.

- IV. Claims 31-52, drawn to a method for making a rubber composition comprising steps including 1) "forming a mixture by combining a curative, an uncured or partially cured elastomeric material, and a thermoplastic material," and 2) "heating the mixture... to effect vulcanization of the elastomeric material," with application of mechanical energy during the heating step, classified in class 525, subclasses vary.
- V. Claims 53-70, drawn to "(a) shaped article comprising a cured fluorocarbon elastomer dispersed in a matrix comprising a thermoplastic material," classified in class 525, subclasses vary.
- VI. Claims 71-80, drawn to a continuous process for making a processable rubber composition comprising steps including 1) "combining a fluorocarbon elastomer, curative agent, a thermoplastic material comprising a non-fluorine containing thermoplastic polymer in a twin screw extruder," and 2) "mixing the combination in the twin screw extruder for a time and at a temperature sufficient to effect cure of the fluorocarbon elastomer," and 3) "extruding the cured mixture," classified in class 525, subclasses vary.
- VII. Claims 81 and 82, drawn to "an article, classified in class 525, subclasses vary.
- VIII. Claims 83-85, drawn to "(a) method for reducing costs of a manufacturing process for making shaped rubber articles from a processable rubber

composition," using recycled scrap material, classified in class 525, subclasses vary.

- IX. Claims 86-95, drawn to "(a) processable rubber composition comprising a cured fluorocarbon elastomer dispersed in a thermoplastic matrix, wherein the thermoplastic matrix comprises an aromatic polyamide, and wherein the cured fluorocarbon elastomer is present at a level of greater than or equal to 35% by weight based on the total weight" of the composition, classified in class 525, subclasses vary.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I, II, III, V, VII and IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different characteristics that are deemed patentably distinct, such as in Group I, compositional limitations, Group II, discrete-phase dimensions, Group III, product-by-process, Group V, shaped article, Group VII, shaped article, and Group IX, particular components, e.g. polyamide thermoplastic material. These characteristics are responsible for producing different functions and effects.

Inventions of Groups I, II, III and IX and of Groups IV, VI and VIII are related as processes of making and products made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by

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another and materially different process (MPEP § 806.05(f)). In the instant case the compositions are made according to the several processes and the several processes are employed to make the compositions. It is not clear, nor can it be easily determined to which composition belongs to which process.

Inventions of Groups IV, VI and VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different steps that are deemed patentably distinct. These steps are responsible for producing different functions and effects.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

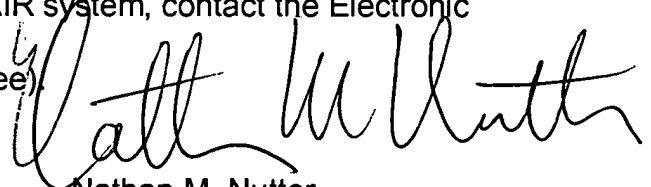
Due to the complexity of the requirement, applicant's counsel was not contacted to request an oral election to the restriction.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn

6 January 2005